



**PATENT** 

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF:

BILLY F. MCCUTCHEN ET AL.

**APPLICATION. NO: 09/807,248** 

**FILED: APRIL 9, 2001** 

FOR: **SCORPION TOXINS**  CASE NO: BB1208 US PCT

**GROUP ART UNIT: UNKNOWN** 

**EXAMINER: UNKNOWN** 

#### INFORMATION DISCLOSURE STATEMENT

**Assistant Commissioner for Patents** Washington, D.C. 20231

Sir:

In compliance with 37 CFR 1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office information listed on the enclosed PTO/SB/08. A copy of the information is also enclosed. Also attached please find a copy of an International Search Report from a corresponding foreign application and copies of those references cited therein.

Should any fee be required in connection with the filing of this Information Disclosure Statement, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

PAUL D. GOLIAN

Attorney for Applicants

Registration No. 42,591 Telephone: 302-992-3749 Facsimile: 302-892-1026

Encl.



Note:

### Certificate of Mailing under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Assistant Commissioner for Patents Washington, D.C. 20231

Date

LISA Z. TURNER

Type or printed name of person signing Certificate

Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

APPLICATION NO: 09/807,248
DOCKET NO: BB1208 US PCT
INFORMATION DISCLOSURE STATEMENT
PTO/SB/08 FORMS (3)
INTERNATIONAL SEARCH REPORT
REFERENCES
POSTCARD

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

Complete if Known		
09/807,248	7	
April 9, 2001	SEP	
Billy F. McCutchen et al.	EX.	
Unknown	E.	
Unknown		
BB1208 US PCT		
	09/807,248 April 9, 2001 Billy F. McCutchen et al. Unknown Unknown	

U.S. PATENT DOCUMENTS								
Examiner Initials *		U.S. Patent Docume	ent	Name of Patentee or Applicant	Date of Publication of	Pages Columns Lines Where Relevant		
	Cite No. <sup>1</sup>	Number Kind Coo	de <sup>2</sup>	of Cited Document	Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		4,925,664		Jackson et al.	05-15-1990			
·····				***************************************				
······································	<del> </del>							
		· ·			<u> </u>			
	<del> </del>							
<del></del>	<del>  `                                   </del>							
·	ļ			······································	مبيرسي	and the same of th		
	ļ	<del> </del>						
	<u> </u>							
:	·					1		
· · · · · · · · · · · · · · · · · · ·								
					·			
					<del>-</del>			

			FO	REIGN	PATENT DOCUM	ENTS		
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document ite		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>	
		World	96/36712	A1	E.I. du Pont de Nemours & Company	11-21-1996	·	
		World	96/36221	A2	The Regents of the University of California	11-21-1996		
						_	•	
					-			
					·			
		·						
			-				÷,	

	· · · · · · · · · · · · · · · · · · ·		
Examiner		Date	
Signature		Considered	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark hee if English language Translation is attached.

> +

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 3

	Complete if Known	
Application Number	09/807,248	$T^{-}$
Filing Date	April 9, 2001	S
First Named Inventor	Billy F. McCutchen et al.	图
Group Art Unit	Unknown	V
Examiner Name	Unknown	
Attorney Docket Number	BB1208 US PCT	
<del></del>		

	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
		PIERRE SAUTIERE ET AL., Toxicon, vol. 36(8):1141-1154, 1998, New toxins acting on sodium channels from the scorpion leiurus quinquestriatus hebraeus suggest a clue to mammalian vs. insect selectivity				
		HAIM MOSKOWITZ ET AL., Eur. J. Biochem., vol. 254:44-49, 1998, A depressant insect-selective toxin analog from the venom of the scorpion Leiurus quinquestriatus hebraeus				
		BALKISS BOUHAOUALA-ZAHAR ET AL., Eur. J. Biochem., vol. 238:653-660, 1996, A recombinant insect- specific alpha-toxin of Buthus occitanus tunetanus scorpion confers protection against homologous mammal toxins				
		MARK J. DUFTON ET AL., J. Mol. Evol., vol. 20:120-127, 1984, Classification of scorpion toxins according to amino acid composition and sequence				
		FRANCOIS MIRANDA ET AL., Eur. J. Biochem., vol. 16:514-523, 1970, Purification of animal neurotoxins				
		JUAN C. FONTECILLA-CAMPS, J. Mol. Evol., vol. 29:63-67, 1989, Three-dimensional model of the insect-directed scorpion toxin from androctonus australis hector and its implication for the evolution of scorpion toxins in general				
		NOAM ZILBERBERG ET AL., Journ. of Biol. Chem., vol. 272(23):14810-14816, 1997, Identification of structural elements of a scorpion alpha-neurotoxin important for receptor site recognition				
		ERIK JOHNSON ET AL., J. Neurogenetics, vol. 12(1):1-24, 1998, Genetic and pharmacological identification of ion channels central to the drosophila cardiac pacemaker				
		PETER A. FRIEDMAN, Annu. Rev. Physiol., vol. 60:179-197, 1998, Codependence of renal calcium and sodium transport				
		E. ZLOTKIN ET AL., Arch. of Biochem. & Biophys., vol. 240(2):877-887, 1985, An excitatory and a depressant insect toxin from scorpion venom both affect sodium conductance and possess a common binding site				
		E. ZLOTKIN ET AL., Biochimie, vol. 53:1073-1078, 1971, Purification and properties of the insect toxin from the venom of the scorpion Androctonus australis Hector				

Examiner	Date
Signature	Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

### **INFORMATION DISCLOSURE** STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

	Complete if Known	OIA
Application Number	09/807,248	7
Filing Date	April 9, 2001	
First Named Inventor	Billy F. McCutchen et a	SEP U B
Group Art Unit	Unknown	Pro.
Examiner Name	Unknown	FRADEN
Attorney Docket Number	BB1208 US PCT	

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	· τ
·		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 134335, 12-15-1998, GREGOIRE, J. ET AL., Covalent structure of toxins I and II from the scorpion Buthus occitanus tunetanus	
		J. GREGOIRE ET AL., Toxicon, vol. 21(1):153-162, 1983, Covalent structure of toxins I and II from the scorpion Buthus occitanus tunetanus	
		ORIETTA VARGAS ET AL., Toxicon, vol. 21(1):79, 1982, Neurotoxins from the venoms of two scorpions: Buthus occitanus tunetanus and Buthus occitanus mardochei	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 102796, 09-30-1993, E. ZLOTKIN ET AL., Functional duality and structural uniqueness of depressant insect-selective neurotoxins	
		E. ZLOTKIN ET AL., Biochemistry, vol. 30:4814-4821, 1991, Functional duality and structural uniqueness of depressant insect-selective neurotoxins	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 1041278, 08-21-1996, BOUHAOUALA-ZAHAR, B. ET AL., A recombinant insect-specific alpha-toxin of buthus occitanus tunetanus scorpion confers protection against homologous mammal toxins	
-		B. BOUHAOUALA-ZAHAR ET AL., Eur. J. Biochem., vol. 238(3):653-660, 1996, A recombinant insect-specific alpha-toxin of buthus occitanus tunetanus scorpion confers protection against homologous mammal toxins	
	·		

Examiner	Date	
Signature	Considered	
Olgitatare	Considered	<u> </u>

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.